IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

VIRNETX INC.,	§	
	§	
Plaintiff,	§	
	§	
vs.	§	**CASE NO. 6:11-CV-18**
	§	
MITEL NETWORKS CORP., et al.,	§	
	§	
Defendants.	§	
	§	

MEMORANDUM OPINION AND ORDER

This Memorandum Opinion construes the disputed claim terms in U.S. Patent Nos. 6,502,135 ("the '135 Patent"), 7,418,504 ("the '504 Patent"), and 7,921,211 ("the '211 Patent").

BACKGROUND

VirnetX Inc. ("VirnetX") asserts the three patents-in-suit against Mitel Networks Corporation; Mitel Networks, Inc. (collectively "Mitel"); Siemens Enterprise Communications GmBH & Co. KG; Siemens Enterprise Communications, Inc. (collectively "Siemens"); and Avaya Inc. ("Avaya") (collectively "Defendants"). The '135 Patent discloses a method of transparently creating a virtual private network ("VPN") between a client computer and a target computer. The '504 and '211 Patents disclose a secure domain name service.

The patents-in-suit are all related; Application No. 09/504,783 ("the '783 Application") is an ancestor application for every patent-in-suit. The '135 Patent issued on December 31, 2002, from the '783 Application. The '504 Patent issued from a continuation of a continuation-in-part of the '783 Application. Finally, the '211 Patent is a continuation of the application that resulted in the '504 patent.

This Court has recently construed all but one of the terms at issue. *See VirnetX, Inc. v. Cisco Systems, Inc.*, No. 6:10-cv-417 (E.D. Tex. Apr. 25, 2012) ("*Cisco*"). Further, many of those terms were construed by this Court in a previous case that involved the '135 Patent. *See VirnetX, Inc. v. Microsoft Corp.*, 2009 U.S. Dist. LEXIS 65667, No. 6:07cv80 (E.D. Tex. July 30, 2009) ("*Microsoft*"). Thus, this is the third time this Court has considered many of the terms at issue. Given the recent opinion construing most of these terms, the Court hereby incorporates the entirety of the reasoning therein. *See Cisco*, No. 6:10-cv-417 (E.D. Tex. Apr. 25, 2012). The opinion below addresses new arguments and new terms presented by the parties.

APPLICABLE LAW

"It is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). In claim construction, courts examine the patent's intrinsic evidence to define the patented invention's scope. *See id.*; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc'ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). This intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int'l Trade Comm'n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term's context in the asserted claim can be very instructive. *Id.* Other asserted or unasserted claims can also aid in determining the

claim's meaning because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term's meaning. *Id.* For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* at 1314–15.

"[C]laims 'must be read in view of the specification, of which they are a part.'" *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). "[T]he specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'" *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *see also Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor's lexicography governs. *Id.* Also, the specification may resolve ambiguous claim terms "where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone." *Teleflex, Inc.*, 299 F.3d at 1325. But, "'[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.'" *Comark Commc'ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics,*

Inc., v. Lifescan, Inc., 381 F.3d 1352, 1356 (Fed. Cir. 2004) ("As in the case of the specification, a patent applicant may define a term in prosecuting a patent.").

Although extrinsic evidence can be useful, it is "'less significant than the intrinsic record in determining the legally operative meaning of claim language.'" *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert's conclusory, unsupported assertions as to a term's definition is entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is "less reliable than the patent and its prosecution history in determining how to read claim terms." *Id.*

LEVEL OF ORDINARY SKILL IN THE ART

The parties agree that a person of ordinary skill in the art would have a master's degree in computer science or computer engineering and approximately two years of experience in computer networking and computer network security.

CLAIM TERMS

virtual private network

VirnetX proposes "a network of computers which privately and directly communicate with each other by encrypting traffic on insecure communication paths between the computers." Defendants propose "a network of computers which privately and directly communicate with each other by encrypting traffic on insecure communication paths between the computers to accomplish both data security and anonymity, and in which a computer is able to address

additional computers over the network without additional setup." In *Cisco*, the Court construed this term as "a network of computers which privately and directly communicate with each other by encrypting traffic on insecure communication paths between the computers where the communication is both secure and anonymous."

The Court's *Cisco* analysis has already addressed the parties' arguments relating to the "secure and anonymous" limitation. *See Cisco*, slip op. at 5. Here, Defendants seek the additional limitation "and in which additional computers can be addressed over the network without additional setup." During reexamination of the '135 Patent, VirnetX argued that the Aventail reference did not disclose a VPN for three reasons. *See* Docket No. 165 attach. 5, at 5–6. The first of these arguments was that "Aventail has not been shown to demonstrate that computers connected via the Aventail system are able to communicate with each other as though they were on the same network." *Id.* at 5. Thereafter, VirnetX provides an example of a situation permitted by a VPN but not by Aventail. In the example, VirnetX explained that two computers (A and B) on a public network that each established independent VPN connections to a private network (containing computers X and Y) would have the ability to communicate with each other over the VPN. However, the same public computers employing the Aventail system would be unable to communicate with each other over the established Aventail (SOCKS) connections.

Defendants seek to impose the "without additional setup" limitation based on the following statement lifted from VirnetX's two paragraph example: "then A would nevertheless be able to address data to B, X, and Y without additional setup." *Id.* at 6. However, the example was provided to illustrate how multiple computers connected via Aventail were not able to "communicate with each other as though they were on the same network." *Id.* at 5. This feature of the VPN is captured with the "directly" limitation discussed in both *Cisco* and *Microsoft*.

Further, it is unclear what "without additional setup" means. Accordingly, the "without additional setup" limitation should not be included in the construction for "virtual private network" because it is already captured in the "directly" limitation.

The Court construes "virtual private network" as "a network of computers which privately and directly communicate with each other by encrypting traffic on insecure paths between the computers where the communication is both secure and anonymous."

virtual private link

VirnetX proposes "a communication link that permits computers to privately and directly communicate with each other by encrypting traffic on insecure communication paths between the computers." Defendants propose "a network of computers which privately and directly communicate with each other by encrypting traffic on insecure communication paths between the computers to accomplish both data security and anonymity, and in which each computer is able to address additional computers without additional setup." In *Cisco,* the Court construed this term as "a virtual private network as previously defined."

Defendants' proposal tracks their proposal for "virtual private network," which has been addressed. For the same reasons stated in *Cisco,* the Court construes "virtual private link" as "a virtual private network as previously defined."

secure communication link

VirnetX proposes "a direct communication link that provides data security." Mitel and Siemens propose "a direct communication link that provides data security by encrypting data on insecure communications paths, and in which a computer is able to address additional computers over the communication link without additional setup." Avaya proposes that the term be construed the same as "virtual private network." In *Cisco,* the Court initially construed the term as "a direct communication link that provides data security"; however, the *Cisco* parties later

agreed to the following construction: "a direct communication link that provides data security through encryption."

Avaya advances essentially the same arguments addressed in *Cisco* where the defendants proposed a construction of "virtual private network communication link." Mitel and Siemens agree that data security is provided through encryption. In *Cisco*, VirnetX ultimately agreed that data security is provided through encryption. Thus, the "through encryption" limitation is applicable in the instant case.

For these reasons and those discussed in *Cisco*, the Court construes "secure communication link" as "a direct communication link that provides data security through encryption."

domain name service

VirnetX proposes "a lookup service that returns an IP address for a requested domain name," adopting the Court's previous construction of this term in *Microsoft*. Defendants propose to append "to the requester" to VirnetX's proposed construction, which the Court did in *Cisco*.

For the same reasons discussed in *Cisco*, the Court construes "domain name service" as "a lookup service that returns an IP address for a requested domain name to the requester."

domain name

VirnetX proposes the same construction adopted by the Court in *Microsoft* and *Cisco*: "a name corresponding to an IP address." Mitel and Siemens propose "a hierarchical sequence of character segments separated by periods." Avaya proposes "a hierarchical sequence of character segments, separated by periods and arranged in decreasing order of specificity, that resolves to an IP address."

For the same reasons stated in *Microsoft* and *Cisco*, the Court construes "domain name" as "a name corresponding to an IP address."

DNS proxy server

VirnetX proposes "a computer or program that responds to a domain name inquiry in place of a DNS." Defendants propose "a computer or program that responds to a DNS request in place of a DNS, and prevents destination servers from determining the identity of the entity sending the DNS request." VirnetX's proposal and the first portion of Defendants' proposal reflect the construction adopted by this Court in *Microsoft*. Here, as in *Cisco*, the dispute is whether a DNS proxy server "prevents destination servers from determining the identity of the entity sending the domain name inquiry." In *Cisco*, the Court construed the term as "a computer or program that responds to a domain name inquiry in place of a DNS."

For the reasons stated in *Microsoft* and *Cisco*, the Court construes "DNS proxy server" as "a computer or program that responds to a domain name inquiry in place of a DNS."

domain name service system

VirnetX proposes that no construction is necessary, but alternatively proposes "a computer system that includes a domain name service (DNS)." Defendants propose "a DNS that is capable of differentiating between, and responding to, both standard and secure top-level domain names." In *Cisco*, this Court determined that no construction was necessary.

For the same reasons stated in *Cisco*, the Court finds that "domain name service system" does not require construction.

web site

VirnetX proposes "a computer associated with a domain name and that can communicate in a network." Defendants propose "one or more related web pages at a location on the World Wide Web." These two proposals mirror the proposals made in *Microsoft* and *Cisco*. In both cases, the Court adopted Defendants' proposal.

For the same reasons stated in *Microsoft* and *Cisco*, the Court construes "web site" as "one or more related web pages at a location on the World Wide Web."

secure web site

VirnetX proposes "a computer (target computer) associated with a domain name and that can communicate in a virtual private network." Defendants propose "a web site that requires authorization for access and that can communicate in a VPN." In *Cisco*, the Court construed this term as "a web site that requires authorization for access and that can communicate in a VPN."

For the same reasons stated in *Cisco*, the Court construes "secure web site" as "a web site that requires authorization for access and that can communicate in a VPN."

secure target web site

VirnetX proposes "a computer (target computer) associated with a domain name and that can communicate in a virtual private network." Defendants propose "the secure web site on the target computer." In *Cisco*, the Court construed this term as "a web site that requires authorization for access and that can communicate in a VPN."

For the same reasons stated in *Cisco*, the Court construes "secure target web site" as "a secure web site on the target computer."

target computer

VirnetX argues that no construction is necessary, but alternatively proposes "a computer with which the client computer seeks to communicate." Defendants propose "the ultimate destination computer with which the client computer seeks to communicate." In *Cisco*, the Court determined that no construction was necessary.

For the same reasons stated in *Cisco*, the Court finds that "target computer" does not require construction.

between [A] and [B]

VirnetX argues that no construction is necessary, and Defendants propose "extending from [A] to [B]."[1] In *Cisco*, the Court construed this term as "extending from [A] to [B]." For the same reasons stated in *Cisco*, the Court construes "between [A] and [B]" as "extending from [A] to [B]."

an indication that the domain name service system supports establishing a secure communication link

VirnetX argues that this term does not require construction. Defendants propose "a message or signal that informs the user that the domain name service system supports establishing a secure communication link." In *Cisco*, the Court determined that no construction was necessary.

The *Cisco* defendants argued that the indication must be visual to the user. The Court rejected that argument, explaining that it was an attempt to import a limitation from a preferred embodiment. *See Cisco*, slip op. at 27–28. The Defendants here argue that the indication must be to the user. Defendants again rely on the "one-click" systems discussed in the '504 Patent and Figures 33 and 34. *See* '504 Patent col. 49:6–12. However, the specification reveals a system where "the secure link is automatically established as a default setting at boot-up of the computer (i.e., no click)." *Id.* col. 49:10–12. Thus, the indication may be provided to the computer directly (e.g., via configuration files) as opposed to the user. The claims themselves do not limit whether the indication is made to the user or the user's computer. Defendants' proposed construction improperly limits the claims to a preferred embodiment.

This term is readily understandable and does not require construction.

[1] The parties present the terms as: (1) "between [a/the] first location and [a/the] second location"; and (2) "between a client computer and target computer." However, the terms may be collapsed to "between [A] and [B]" without affecting Defendants' proposed constructions.

indicate/indicating in response to the query whether the domain name service system supports establishing a secure communication link

VirnetX argues that this term does not require construction. Defendants propose "inform/informing the user in response to the query whether the domain name service system supports establishing a secure communication link." The issue and arguments regarding this term are identical to those raised for the previous term. For the same reasons stated regarding the previous term, this term does not require construction.

query

VirnetX proposes that this term does not require construction. Defendants propose "a request for information from a database." Defendants argue that query must be construed because it has both a lay and technical meaning. Defendants' proposed construction adopts the technical meaning and seeks to limit queries to database queries. VirnetX argues that this limitation is not supported by the specification or claims. VirnetX further argues that the meaning of query is clear from the context of its use in the claims.

Claim 1 of the '504 Patent claims a "domain name service system configured . . . to receive a query for a network address . . . ." '504 Patent col. 55:51–54. Further, claim 1 makes no mention of a database. However, other claims in the '504 Patent do specifically reference databases. *See, e.g.*, '504 Patent Claims 20 & 21. Thus, there is no indication that the query of claim 1 should be limited to a database query as requested by Defendants. Query, as used in the claims of the patents-in-suit, is readily understood and is not limited to the technical meaning employed in the database context. Defendants' attempt to limit the queries to database queries is not supported by the claims.

Accordingly, this term does not require construction.

CONCLUSION

For the foregoing reasons, the Court interprets the claim language in this case in the manner set forth above. For ease of reference, the Court's claim interpretations are set forth in a table in Appendix A.

So ORDERED and SIGNED this 1st day of August, 2012.

LEONARD DAVIS
UNITED STATES DISTRICT JUDGE

APPENDIX A

Claim Term	Court's Construction
virtual private network	a network of computers which privately and directly communicate with each other by encrypting traffic on insecure paths between the computers where the communication is both secure and anonymous
virtual private link	a virtual private network as previously defined
secure communication link	a direct communication link that provides data security through encryption
domain name service	a lookup service that returns an IP address for a requested domain name to the requester
domain name	a name corresponding to an IP address
DNS proxy server	a computer or program that responds to a domain name inquiry in place of a DNS
domain name service system	No construction necessary
web site	one or more related web pages at a location on the World Wide Web
secure web site	a web site that requires authorization for access and that can communicate in a VPN
secure target web site	a secure web site on the target computer
target computer	No construction necessary
between [A] and [B]	extending from [A] to [B]
an indication that the domain name service system supports establishing a secure communication link	No construction necessary
indicate/indicating in response to the query whether the domain name service system supports establishing a secure communication link	No construction necessary
query	No construction necessary